MFT - UNIT LEARNING OUTCOMES (ULO)

S.NO	UNIT CODE	DESCRIPTION	UNIT LEARNING OUTCOMES
1.	MFT CSC 101	**Digital Transformation and Enabling Technologies in FinTech (C)** Understand the role of Digital Transformation. Understand how new emerging technologies like Digital Communications, Cloud Computing, Internet of Things, AR/VR, and Cyber Security and Business Disruption. Analyse the impact of emerging technologies on existing business models. Learn As-a-service models. Explore new business models.	A. Understand concept of Digital Transformation and its importance for organizational survival. B. Analyse the role of emerging technologies and their impact on traditional business models and disruptive business models. C. Communicate problems, methods and solutions effectively using mathematical and computerized expressions and presentations. D. Develop and recommend solutions to the identified security-threats on application, data, and host E. Integrate potential emerging technologies for business solutions
2	MFT FIN 101	**Introduction to Banking Financial Services and Markets (C)** Understanding evolution of Banking and financial services. Understanding different players, their role, various products and their interaction with various macro and micro factors. Understand various segments, products and channels. Understanding how they augment and deploy funds and manage their business.	A. Describe the characteristics and role of global financial markets and institutions. B. Discuss the role and functions of central bank and the importance of monetary policy. C. Explain various types of financial markets and instruments. D. Evaluate the risks and opportunities firms face in foreign exchange transactions and international investments and how the firms manage these risks. E. Assess and present how various financial institutions segment their customers, design their instruments and various channels of distribution. F. Evaluate the national and international regulations and ethics in banking and financial services.
3	MFT CSC 102	**Fundamentals of Blockchain Technologies and Applied Blockchain (C)** Understand basic ideas and concepts of Blockchain. Understand Public Key architecture. Learning algorithms based on which blockchain framework is built. Introducing concept of distributed processing and decentralized networks. Basic understanding about consensus mechanism. Understanding Blockchain suitability framework. Looking under the hood of Bitcoin - first Blockchain based crypto currency. The basic understanding of ethics and regulation of Blockchain technologies and applications.	A. Interpret, exemplify and differentiate various algorithms, tools and techniques that are basic to the concept of blockchain, and the advantage of blockchain over traditional systems. B. Analyse and construct various technical aspects and impact of Blockchain and Cryptocurrency C. Assess and critique the ethical and regulatory issues of Blockchain applications to and recommend solutions. D. Communicate problems, methods and solutions effectively using analytical and logical expressions. E. Evaluate impact of Blockchain in various sectors

4	MFT CSC 103	**Cybersecurity and FinTech Ecosystem (C)** This Unit gives the students an understanding of FinTech Eco System and current trends and success and failures in the Fintech start-ups and businesses. Integrate potential emerging technologies to Design & Deliver enterprise solutions. This unit will give student in-depth knowledge on information security issues that focuses on new risks, threats and vulnerabilities associated with the transformation to a digital world. They will also learn the most widely accepted vendor-neutral IT security knowledge and skills. The Unit also covers application, data, and host security, threats and vulnerabilities, access control, identity management, and cryptography and place special emphasis on cybersecurity as it applies to banks and fintech companies.	A. Exemplify global FinTech ecosystem, role of FinTech and Banks and current emerging trends. B. Analyse various problem statements and existing Fintech solutions. Discover various reasons why fintech start-ups fail or succeed. C. Integrate potential emerging technologies to Design & Deliver enterprise solutions. D. Attribute the application, data, and host security, threats and vulnerabilities, access control, identity management, and cryptography. E. Explore and recommend cybersecurity solutions to banking and fintech companies.
5	MFT FIN 102	**Introduction to Accounting and Finance (C)** This foundation unit introduces students to principles and practices in accounting and finance. Students will learn the fundamentals of accounting, transaction analysis and interpreting accounting and financial information and financial statements. This Unit gives the students the foundational knowledge on Accounting and Finance. The unit will also introduce the concept of Time Value of Money and its application for capital budgeting and instrument valuation. The unit will elaborate on risk and return, capital structure choices, process of raising capital and dividend policy. The students will be familiarised with financial management of long-term and short-term requirements of firms.	A. Understand key accounting concepts and theories and recognise the importance of accurate financial reporting and full disclosures. B. Evaluate the impact of transactions and time period assumptions on a firm's accounts and financial statements. C. Construct and analyse financial and cashflow statements accurately D. Explain key concepts, techniques and term and short financial management. E. Examine the term structure of interest rates, bond yields and various bond equity valuation models. F. Compare and differentiate the relationship between risk and return and impact of leverage on a firm's cost of capital, capital structure and value.
6	MFT CSC 105	**Introduction to Programming Excel VBA and Python (C)** This unit will teach the concepts of programming in the Excel VBA and Python languages. They will learn the use of VBA as a scripting language for Excel and a general-purpose language. Students will also learn Python as a general-purpose object-oriented programming language, its data and programming structures, and its most important libraries.	A. Design and deploy techniques and capabilities of VBA and how it works in tandem with MS-Excel B. Learn the control and user interface features of VBA and how these can be used to create functions and add-ins C. Design and deploy Python as a general-purpose object-oriented programming language, its data and programming structures D. Implement important Python libraries, including Pandas, NumPy, SciPy, Matplotlib E. Demonstrate and communicate problems, methods and solutions effectively using mathematical and computerised expressions and presentations.

7	MFT CSC 104	**Data Science, AI and Machine Learning in FinTech (C)** Examine the basic concepts of data science, artificial intelligence, machine learning, and their applications in FinTech. Understand the use of quantitative methods of data driven analytics and discovery, search, decision-making, and pattern learning, to solve problems arising in the FinTech industry. Apply data-based Artificial Intelligence and Machine learning to FinTech problems and identify the challenges in regulatory and ethical implications.	A. Evaluate and analyse data and use quantitative data-based methods to solve planning and decision-making problems B. Apply the concepts of Artificial Intelligence and learn mathematical, logical, and statistical methods to solve AI problems C. Recognise the theory of Machine Learning, the implementation of statistical learning algorithms and their deployment for supervised and unsupervised learning D. Illustrate and apply data-based Artificial Intelligence and Machine Learning tools and techniques to FinTech problems and their ethical implications E. Research and distinguish state-of-the art techniques and capabilities of the quantitative data sciences and understand their relevance to FinTech
8	MFT FTC 101	**Design and Critical Thinking in FinTech (C)** Design Thinking (DT) helps students unleash their creative/innovative potential using the DT methodology of the world's top DT consulting firm (IDEO). Students learn the methodology and innovation tools and techniques with a simulation game designed by IDEO and an experiential-learning gamifier (a real 4-month project condensed into 4 hours). Then, students choose their own real-life challenge and use the methodology in a design sprint to craft a creative solution based on the consumer insights they discovered. Along with traditional design thinking methodology, the students will be also going through the digital design thinking journey and various nuances.	A. Understand design thinking concepts, innovation tools, and value-creation techniques. B. Conduct IDEO-style qualitative business (ethnographic) research to uncover consumer insights, needs, and wants. C. Analyse complex cross-cultural situations with an effective innovation methodology and toolset. Understand importance of gamification and digital design thinking D. Critique and draw inferences from qualitative data to creatively solve a problem. Lead Organizational Digital Transformation and Change Management E. Integrate sustainable and responsible Digital Design Thinking with Emerging Technologies with ethical responsibility
9	MFT CSC 201	**Big Data Analytics and Data Visualisation (C)** Acquire advanced knowledge of the concepts in Big Data systems, the Hadoop ecosystem, distributed programming, and the Apache Spark platform. Understand the foundations of cloud computing and cloud engineering. Evaluate and implement the principles of data visualisation using Tableau. Recognise and understand how to tell a story using visualisation. Apply ethical imperatives and requirements for the professional practices and ethics of using data analytics.	A. Acquire advanced knowledge in the concepts of Big Data systems, the Hadoop ecosystem, distributed programming, and the Apache Spark platform B. Apply the principles of distributed programming, cloud computing and cloud engineering C. Evaluate and implement the principles of data visualisation with Tableau, and how to tell stories visually D. Demonstrate and communicate problems, methods and solutions effectively using mathematical and computerized expressions and presentations. E. Apply ethical imperatives and requirements for professional practices and ethics surrounding the use of Big Data analytics

10	MFT FIN 201	**Ethics in Financial Regulatory Landscape and RegTech (C)** This Unit describes the existing system of international financial regulation and proposes some needed improvements. It also explains the range of financial regulation topics being addressed across the globe and describe the complex bureaucratic organisms through which they are discussed and occasionally resolved. It analyses the Regulatory Strategy and Compliance of Data Protection using technologies in Finance Sector.	A. Acquire advanced knowledge of ethical imperatives and requirements in the existing and evolving system of international financial regulation and RegTech. B. Examine the range of financial regulation addressed across the globe. C. Analyse regulations and acts in jurisdictions across the globe. D. Evaluate the financial technology used to implement regulation, supervision, and compliance. E. Communicate problems, methods and solutions for RegTech
11	MFT FTC 202	**Smart contracts and Initial Coin Offering (C)** Recognise the fundamental skills and knowledge on the importance and use cases of Smart contracts using various tools and methods for Smart contract development. Learn smart contract nuances. Explore and recommend legal and compliance related considerations under smart contract development. Learn different Smart contracts framework. Understand Auditing and Security Considerations in smart contracts. The functioning of Initial Coin Offering (ICO) and Security Token Offering (STO). Explore Smart contract for initial coin offering. Learn token economics. Understand existing global scenario and regulatory framework. Understand types of tokens and suitability. Explore various disruptive business models based on tokens.	A. Recognise the fundamental skills and knowledge necessary to apply smart contract design principles, tools and methods to develop smart contracts. B. Examine smart contract marketplace and customise smart contracts. Connect smart contract to external events. Understand technical considerations in smart contract deployment and update. Understand concept of Initial Coin Offering, Security Token Offering and how to launch one C. Explore security implications and legal, compliance and recommend regulatory solutions in national and global environment. D. Compare Crypto Assets, Crypto Currencies and trading and invest.
12	MFT PRO 201	**Industry Simulation (C)** This unit is based on Finconnecta Acelera® simulation which is designed to provide a deep dive into the Digital Transformation in the Financial Industry. The students will participate in this simulation game to get a detailed and holistic perspective of the digital transformation for the Financial Industry. This will foster the initiation and development of a robust strategic conversation among the future executives about diverse aspects of digital transformation and the future of the institution in a technology-disrupted world. This will also provide a detailed exposure to the five domains of digital transformation namely, business model, approach to innovation, customer engagement and culture & organisation. Through this simulation, the students get an opportunity to integrate and apply concepts across all disciplines of Digital Transformation in the Financial sector through one strategic, competitive and engaging learning experience.	A. Explore and contextualise futuristic changes in clients' needs and their impact on different domains of digital transformation. B. Critique and evaluate Adoption of an Agile Mindset and analysing various scenarios including, Remittances and Distributed Ledger Technology; Call Centre Reengineering using Artificial Intelligence; Alternative Technology Models; KYC Process Management; Digital Currency Strategies; Social Media Management C. Generate and hypothesise strategies incorporating technologies such as blockchain, Robo Advisory, etc to collaborate, build, buy or partner for expanding lending capabilities and agency banking. D. Construct alternative outcomes and make decisions in areas like, Equity Crowdfunding; Recruiting Digital Talent; Data Analytics; FinTech Vendor Management; Enhancing Mobile Wallet; Organisational Design; Digital Banking platforms etc

13	MFT PRO 202	**Applied Industry Project (C)** This Industry project (IP) unit provides participants with an opportunity to undertake self-directed individual research project in the Fintech area. Industry Project is discovery oriented and exploratory in nature which aims to demonstrate 'Inquiry' based analysis of the FinTech business environment through a field research and application of concepts. Industry Project is methodology based and entails interactions with multiple stakeholders of the industry.	A. Formulate and design a suitable project idea, plan and work in teams to execute the plan B. Critique and develop capabilities towards scanning and analysing global business environment for effective decision-making with ethical and social responsibility. C. Investigate, analyse and synthesise complex information and apply relevant bodies of knowledge of financial technologies in the FinTech business environment. D. Developing skills in design, implementation and evaluation of basic research process and options. E. Writing and presenting a comprehensive project report.
14	MFT FTC 203	**FinTech Innovation and Disruption across Industries (E)** Students will learn about FinTech innovation, digital transformation, and types of innovation, product, process, organisational, business model and details for each type of innovation, and critical success factors for them to succeed. They will also learn about financial services as platforms, its evolution and reshaping, technological disruptions, and the global state of the FinTech industry, and lessons learned from successes and failures.	A. Attribute FinTech innovation, digital transformation, and types of innovation, product, process, organisational, business model. B. Evaluate the type of innovation, and critical success factors for them to succeed. C. Critique the evolution and reshaping of financial services as platforms and technological disruptions. D. Analyse the global state of the FinTech industry, and lessons learned from successes and failures. E. Execute and communicate methods and solutions for various problems
14	MFT FTC 206	**FinTech Start-up Ecosystem (E)** Understand evolution of FinTech. Concept of financial innovation. Various factors contributing to growth of Fintech. Understanding current global scenario. Understanding the FinTech approach. Exploring various FinTech business models. Understanding product and service differentiation. Understanding FinTech Start-up ecosystem.	A. Exemplify and explore the history and various subdomains in FinTech and role of technology in traditional business models. B. Critique the role of various enabling technology in FinTech. C. Attribute various business models in FinTech Start-up Ecosystem. D. Communicate problems, methods and solutions effectively using new initiatives and computerized expressions and presentations within a team.
14	MFT FTC 207	**Fintech in Islamic Finance (E)** Students will learn the conceptual analysis of the Sharia and legal aspects of fintech in Islamic finance, this unit will cover relevant case studies showing current and potential developments in the application of fintech in various sectors ranging from crowdfunding and smart contracts, to Online Dispute Resolution, Investment Account Platform and identity verification in the Know Your Customer (KYC) process.	A. Attribute FinTech innovation, digital transformation, and types of innovation, product, process, organisational, business model in Islamic Finance B. Evaluate the type of innovation, and critical success factors for them to succeed. C. Exemplify and explore the various subdomains in Islamic FinTech and role of technology. D. Analyse the Islamic FinTech industry, and lessons learned from successes and failures. E. Execute and communicate methods and solutions for various problems

14	MFT ENT 201	**Project Management for Entrepreneurs (E)** This unit will provide students with basic project management skills, and the skills and knowledge necessary to manage multiple project programs and portfolios that arise during an entrepreneurial venture. They will learn to manage the scope, schedule, risks and various other aspects of projects and master the skills necessary to realise the overall strategy of a venture through project planning and management	A. Acquire advanced skills and knowledge necessary for project management B. Integrate and manage multiple project programs and portfolios that arise in an entrepreneurial venture. C. Manage the scope, schedule, risks and various other aspects of projects D. Design an overall strategy of a venture through project planning and management E. Communicate problems, methods and solutions effectively using mathematical and computerized expressions and presentations.
15	MFT FTC 204	**Wealth Technologies and Insurance Technologies (C)** Understand Sources of Wealth. Understand wealth management in theory and practice. How Robo-advisory works and how mass customization is achieved. Understand how to manage risk and reward expectations. Understand various insurance models and learn how technology can be used to enhance customer experience, discover better product-persona-pricing fit and manage various risks.	A. Understand sources of Wealth, various available products, their structure and suitability. B. Plan to manage risk – reward expectation. C. Examine new business and revenue models that incorporates technologies can help make wealth management more accessible and affordable through Robo-Advisory platforms. D. Explore various categories of Insurance products, their business nuances, and peculiar features. E. Attribute the role of insurance in risk avoidance, risk retention, risk transfer and risk pooling & sharing F. Examine the role of emerging technologies in transformation of the traditional Insurance business.
16	MFT FTC 205	**Financial technologies for Payment and Lending (C)** Understand Payment ecosystem, role of various ecosystem players, evolution of Digital Payments, various products and instruments, payments messaging systems, government and non-government infrastructure and various global regulations including data privacy and data residency. Understand role of credit in economic growth and how credit pricing works. Explore various credit products offered across the customer segments. Understand the role of alternative credit scoring models in financial inclusion. Explore new emerging business models	A. Advanced knowledge of evolution of Payment, role ecosystem players and traditional payment instruments. Compliance requirements, various methods for fraud detection and prevention. B. Assess evolution of Digital Payments, various products & solutions, standardization and payment message structure. Role of government led payment infrastructure. C. Compare role of emerging technologies in transformation of payment industry and the journey from product driven approach to industry & customer centric solutions. D. Explore various categories of Lending products for different customer segment, their business nuances, and peculiar features. E. Explore Credit Appraisal Process and alternative credit scoring mechanism. Credit portfolio Management, credit impairment and recovery. F. Examine the role of emerging technologies in transforming traditional lending models and emergence of new business models.

17	MFT PRO 203	**FinTech Immersion Project (C)** FinTech Immersion Project (FIP) provides a live interface to specific business scenarios enabling participants to take a 'consulting' approach to the real-life business issues in the FinTech domain. This is a 4 Credit Unit. It involves application of their knowledge, functional understanding and specialized learning through close engagement or association with specific client companies.	A. Plan, identify, formulate and address complex business challenges using cross functional skills in the FinTech domain. B. Create strategic or tactical alternatives in specific business scenario by applying relevant models, framework or techniques to solve business challenges. C. Analyse and synthesise complex information and provide contextual and technical advice to apply the proposed solutions towards the given business scenarios in the FinTech domain. D. Hypothesise a viable solution and manage project through a live industry immersion engagement with ethical and social responsibility. E. Write and presenting a comprehensive project report.